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The Austrian Approach Towards Financing Eco-innovation

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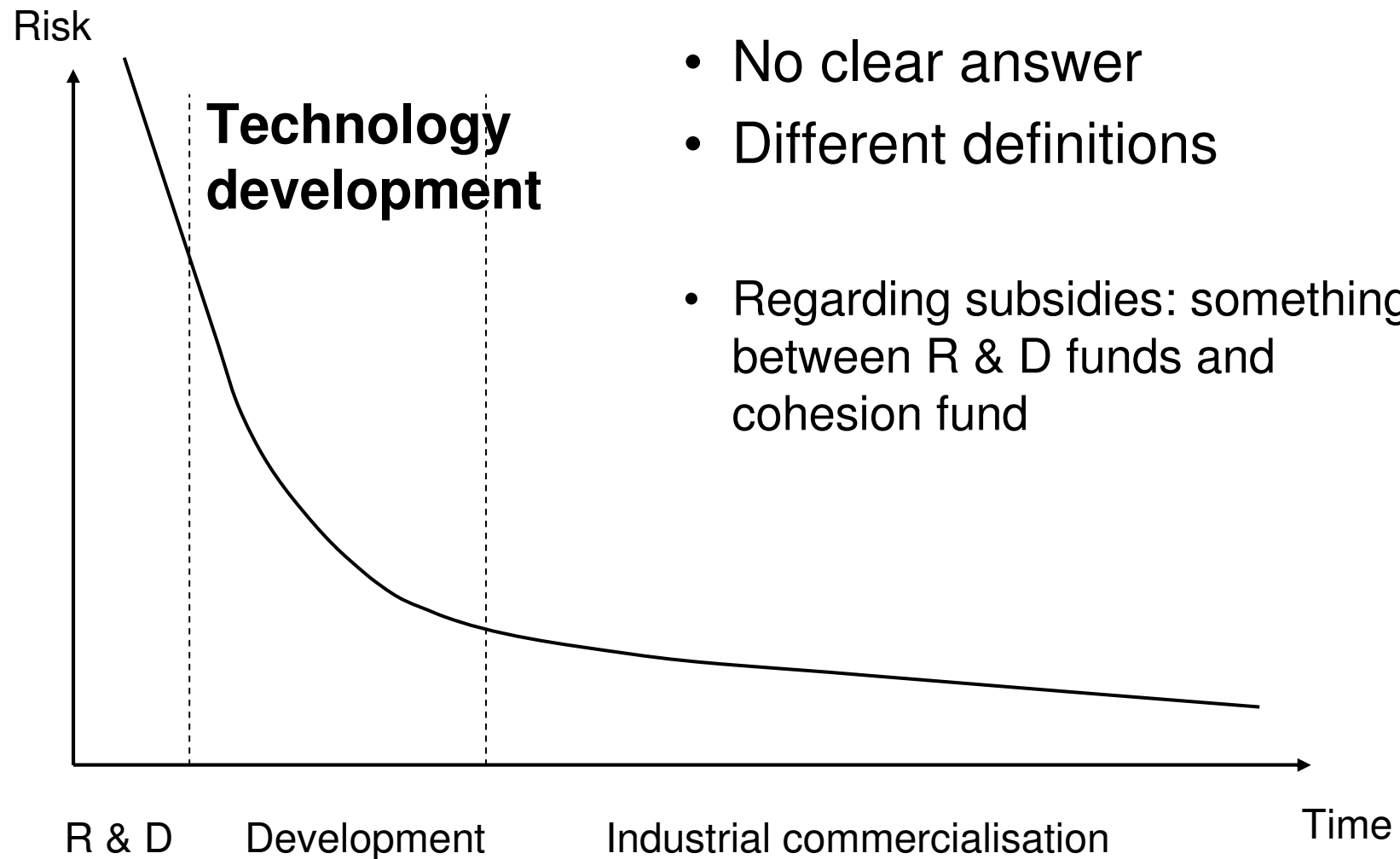
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Content



- What is eco-innovation and why is it different from other innovation
- The political dimension of eco-innovation
- Overlaps and competences
- Possible solutions

What is (eco-)innovation?



What makes eco-innovation different from innovation?



- Technical innovation is market driven and reflects the needs of the consumers (computers, mobiles)
 - Policy has only a minor role (standardisation)
- Banks and investors are used to assess technical and market risks.
- Eco-innovation is also additionally policy driven:
 - Policy sets standards and targets and therefore requires to invest in clean air, water, CO2 reduction
 - Policy itself invests and provides money
- For eco-innovation additional political risks have to be included.

The political dimension of eco-innovation



1. The policy creates the market

- Policy sets standards and requires investments
 - No company would invest voluntarily in a waste water plant
 - Technology development is dependent on the home market (strict norms create innovation)
 - Competitive advantage of frontrunners (Austria, Denmark, Netherlands)
- In a policy driven market elections or reforms can change the market conditions and the consumers behaviour
- Political lobbies often try to change already decided tasks and create a constant uncertain situation
- The market is not stable

Examples for governmental policy risks



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- In Austria in 2003 fluorinated fire-extinguishing gases were forbidden. After a decision of the constitutional court in 2007 they are allowed again.
 - What happens to those companies which accepted the new law and invested in expensive alternative solutions?
 - What happens to companies which developed and sold these new technologies?
- In Germany there is an on-going discussion about nuclear power plants. One government declares the end of the nuclear age, the next revises this position
 - What happens to producers of renewable energy equipment?
- Investors don't prefer one or another solution – but they want the security that their investment will get paid back.



2. The government is a market player itself

- In many cases policy is not only setting the targets but is also the main consumer
 - Different policy levels (federal, regional, local) are involved – sometimes with different views
 - Investments depend on the political will plus the financial possibilities of the investors (municipalities, regions, ministries)
- The market responds to the financial means
 - In a country without money for WWTP no know how will develop and depends on expensive external expertise
- The market and the technology developers depend on the annual budget and any economic crises could affect the situation

Examples for governmental policy risks



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- National investment strategies
 - Without clear commitment for the financial means by the MoF, nobody will invest in environmental technologies.
- Risk awareness of public authorities
 - Even with clear results of R&D projects which show the maturity of a technology the PA wait for others to start (and take the risk of failure)

Differentiate eco-technologies

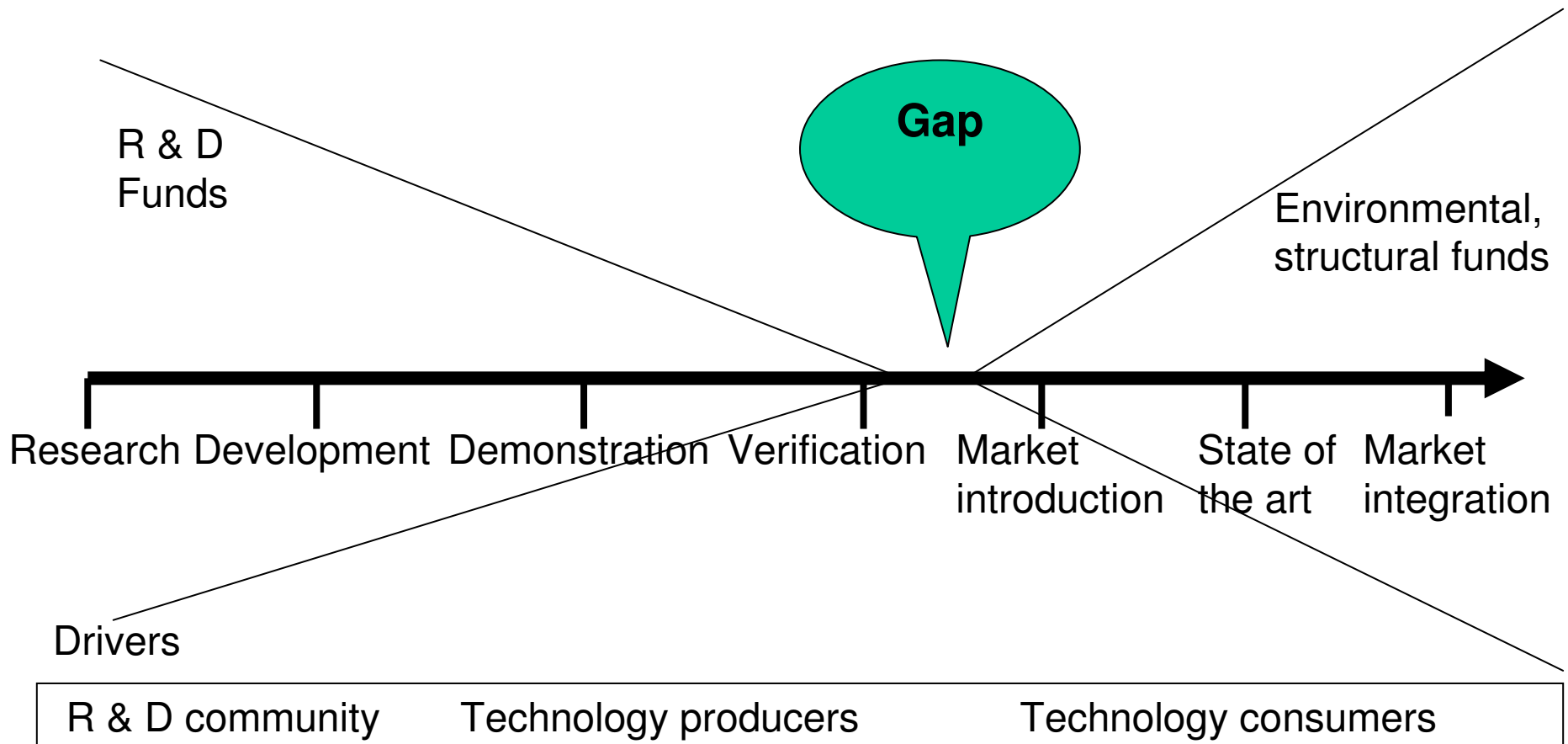


- Technologies without governmental influence
 - Batteries
 - Energy efficiency with short pay back time
- Technologies where the politics create markets
 - Renewable energy
 - Filters (air pollution)
- Technologies where the state is the market
 - Water, wastewater, waste
- Investors work with standardised risk assessment methods – but there is no instrument to assess the political risks

Overlaps and competence conflicts



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Eco-innovation is an interface



- Between producers and consumers
 - Loss of technology because of market (energy prices), risk, investment needs
- Between research funds and structural/cohesion funds
 - Big players with very small complementary funds as CIP, LIFE+
- Between governmental competences (research – environment – economy ministry)
 - Classical square dance of technology providers
- Between state aid regulations
 - Strong restrictions and only few experts in the field

(Austrian) solutions of the problems



1. Risk minimisation

- The policy risks should be reduced by long term strategies
 - Sustainability strategy
 - Agreed on a very broad basis (together with opposite parties and main stakeholders)

2. Financial strategies

- Mid term security for financing means (law, multi-year budget)
 - 5 years financial frame in the law
- Subsidies: Also in their function as proof of the reliability of the political decisions
 - Small lump sums

(Austrian) solutions of the problems



3. Risk capital

- Venture funds and guarantees for a limited scope of technologies
 - AWS (economic fund)
 - CIP
- Cooperation with banks and stimulation of the capital market
- Know-how transfer and information of the investors about upcoming changes

4. Platforms

- Networks, competence centres, technology platforms
 - European centre for renewable energy in Guessing
 - Regional technology clusters

(Austrian) solutions of the problems



5. Inter-ministerial cooperation

- Common strategies (as master plans)
 - Development of a master plan for eco-technologies (MUT)
 - Export oriented technology platforms

6. Cooperation between existing funds

- research + environment
 - Demonstration projects
- New instruments focusing on market introduction of energy technologies
 - energy and climate fund